

**Article title:** The Projection of Iran's Healthcare Expenditures By 2030: Evidence of a Time-Series Analysis

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## Supplementary file 2. Determining the Variables Cointegration Rank

In time series studies, evaluating the stationarity of variables is one of the essential steps. In this study, the Augmented Dicky–Fuller (ADF) test was used to evaluate the stationarity of the variables. The results of this evaluation are presented in the table 2.

Table S2 Augmented Dicky–Fuller (ADF) test results

Variable	(C, T, P)*	P-value	Difference	(C, T, P)	P-value	Result
GDP	(-, -, 1)	0.001	-	-	-	I(0)
LOG(GDP)	(C, T, 1)	0.271	DLOG(GDP)	(C, -, 0)	0.005	I(1)
K	(-, T, 1)	0.625	D(K)	(-, -, 0)	0	I(2)
L	(C, -, 1)	0.044	D(L)			I(0)
LOG(L)	(C, -, 2)	0.332	DLOG(L)	(C, -, 0)	0	I(1)
W/CPI	(-, T, 1)	0.388	D(W/CPI)	(-, -, 1)	0	I(1)
F	(-, T, 9)	0.993	D(F)	(-, T, 4)	0.045	I(1)
POP2060	(-, -, 1)	0	-	-	-	I(0)

CPI	(-, -, 10)	1	D(CPI)	(C, T, 2)	0	I(1)
P	(-, T, 1)	0.995	DP	(-, T, 5)	0.46	I(1)
I	(-, T, 1)	0.268	D(I)	(-, -, 0)	0	I(1)
R	(C, -, 0)	0.437	D(R)	(-, -, 0)	0	I(1)
TAXJ/P	(-, -, 0)	0.976	D(TAXJ/P)	(-, -, 0)	0	I(1)
GEJ/P	(-, -, 1)	0.728	D(GEJ/P)	(-, -, 0)	0	I(1)
XORJ/P	(C, -, 0)	0.152	D(XORJ/P)	(-, -, 0)	0	I(1)
M2j	(-, -, 3)	0.998	DM2j	(-, -, 1)	0.0083	I(2)
HCPI	(-, -, 5)	0.376	D(HCPI)	(-, T, 1)	0	I(2)
GEJ	(-, -, 0)	1	D(GEJ)	(-, -, 0)	0	I(2)
XOG	(-, T, 0)	0.254	D(XOG)	(-, -, 0)	0	I(1)
GRJ/P	(-, -, 0)	0.642	D(GRJ/P)	(-, -, 0)	0	I(1)
LOG(OHEXJ/HCPI)	(-, T, 0)	0.66	D(OHEXJ/HCPI)	(-, -, 0)	0	I(1)
LOG(GDP-(TAXJ/P))	(C, T, 1)	0.136	DLOG(GDP-(TAXJ/P))	(-, -, 0)	0.003	I(1)
LOG(PUBHEXJ/HCPI)	(C, T, 0)	0.013	-	-	-	I(0)
ICOV	(-, -, 0)	0.992	D(ICOV)	(-, -, 0)	0.003	I(1)
LOG(ICOV)	(-, -, 0)	0.989	DLOG(ICOV)	(C, T, 0)	0.004	I(1)
POPT	(C, -, 1)	0.001	-	-	-	I(0)
PPHEXJ/HCPI	(C, T, 1)	0.238	D(PPHEXJ/HCPI)	(-, -, 0)	0.01	I(1)
LOG(POPT)	(C, -, 3)	0.012	-	-	-	I(0)
PIRJ/P	(-, -, 0)	0.999	D(PIRJ/P)	(C, T, 0)	0	I(1)
PPHEXJ/HCPI	(C, T, 1)	0.238	D(PPHEXJ/HCPI)	(-, -, 0)	0.01	I(1)
LOG(PIR/P)	(C, -, 0)	0.023	-	-	-	I(0)
GHEXJ/HCPI	(C, T, 0)	0.316	D(GHEXJ/HCPI)	(-, -, 0)	0	I(1)
POP15R	(C, T, 1)	0.001	-	-	-	I(0)
URR	(C, -, 1)	0.102	D(URR)	(-, -, 0)	0	I(2)
SHIJ/HCPI	(-, -, 0)	1	D(SHIJ/HCPI)	(-, T, 0)	0	I(1)
SIRJ/P	(-, -, 4)	1	D(IRJ/P)	(-, -, 1)	0	I(2)
SICOV	(-, -, 1)	0.649	D(SICOV)	(C, -, 0)	0.053	I(1)
POP60R	(C, -, 1)	1	D(POP60R)	(-, -, 0)	0	I(2)

\*C: Intercept, t: Trend and P number of lags